COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Newport News Shipbuilding and Dry Dock Company
Newport News, Virginia
Permit No. VA-60153

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Newport News Shipbuilding and Dry Dock Company has applied for a Title V Operating Permit for its Newport News shipbuilding facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

I. FACILITY INFORMATION

Permittee
Newport News Shipbuilding and Dry Dock Company
4101 Washington Avenue
Newport News, Virginia 23607

Facility
Newport News Shipbuilding and Dry Dock Company
4101 Washington Avenue
Newport News, Virginia 23607

AIRS ID No. 51-700-00013

II. SOURCE DESCRIPTION

SIC Code: 3731 - Shipbuilding

Newport News Shipbuilding and Dry Dock Company (NNSB) owns and operates a major ship construction and overhaul facility in Newport News, Virginia. The facility is classified as a major source for criteria and hazardous air pollutant emissions from its various operations. It is therefore subject to Title V operating permit requirements. The facility operates under Standard Industrial Classification (SIC) Code 3731. Products manufactured include U.S. Navy-contracted aircraft carriers and submarines, as well as ships for commercial applications such as oil tankers and service ships. Services performed at the facility include all activities related to the repair, overhaul, and conversion of ships. The facility is broken up into several operational segments as follows:
Fuel Burning Equipment - NNSB operates several boilers and other pieces of combustion equipment on site. The main steam plant consists of three units fired with No. 6 fuel oil and/or recovered oil. The three steam generating units are each rated at 135 mmBtu/hour. The facility also houses nine other boilers of significant size. Each of the other seven boilers is fired with liquid or gaseous fuels and emissions are uncontrolled. The facility uses a number of diesel-fired emergency generators ranging in size from just over 1000 kilowatts to less than 100 kilowatts. They are operated for approximately one-half hour per month for maintenance purposes and less than 500 hours per year total per engine. Diesel-fired air compressors are used throughout the facility for various blasting and painting activities. NNSB owns approximately half of these units. The remaining units are leased on an as-needed basis.

Foundry Operations - Alloy steels, copper-nickel, aluminum, brass, and other non-ferrous alloys can be produced by the on-site foundries for a full range of castings necessary for the construction/repair of ships. Foundry operations generally include the following processes: melting, casting, finishing, and sand handling. Alloying agents and fluxing materials are added to the furnaces as needed for a given casting type. The molten metal is poured into sand molds, allowed to cool, and the castings are separated from the molds at shakeout. The sand is

recovered while the castings move to the finishing area. Finishing involves removal of extraneous metal by burning-off, blasting, and grinding. The facility also has a pattern shop to develop and refine the large and complex patterns for such castings as struts, rudders, stern frames, valves, compressor castings, pipes, etc. The sand handling system includes unloading of sand into storage silos, mixing of sand with resin, transferring the sand to machines for the production of molds or cores, and collecting the return sand from the shakeout area. Sand molds provide the exterior shape of the casting. Cores are used for specific internal voids (for example, recessed curves and hollow areas). The foundry uses three electric arc furnaces (EAFs) and one argon/oxygen degassing furnace (AOD). The latter is fired with propane as is the core sand dryer. The small brass foundry uses electric induction furnaces for metal melting.

Steel Preparation and Fabrication Operations - Blasting and coating of steel units are conducted in a blast and coat facility that has computer-controlled temperature and humidity to prevent "flash rust" corrosion on freshly blasted surfaces. The steel units being blasted and coated include plates, I-beams, and other "shapes". After shot blasting the modules, on-site rail lines carry plates to the fabrication and/or production facilities. Emissions are primarily particulates and are exhausted to a baghouse.
Steel plates of varying thickness and sizes are rolled and shaped in the steel production facility. Operations include flame cutting, grinding/shearing, cold and hot forming, planing/milling, punching/drilling, and sawing. The Steel Production facility is an eleven acre complex for the fabrication of structural steel, ranging from small components to complex 300-ton ship subassemblies. Operations include plate preparation, flame planers, automated panel line, web lines, numerically controlled burning machines, flat and curved block shops, and machinery for assembly of circular hull plates. Plate preparation includes some shot blasting and heating to prepare the surface for the next step in the process, painting. In addition, blast units called "toe blasters" are located inside various building at the facility (including buildings 1831, 1745, 276, and 263). Each blast unit vents to a dust collector that exhausts within the structure, so no emissions are anticipated. No Title V reference numbers have been assigned to these units.

Secondary Lead Processing - This facility makes lead shielding plates for reactor spaces and personal protection. For this process, only pure lead ingots are utilized. The process involves the preheating of the ingots prior to melting in furnaces. The metal is then contoured at hot benches and finished using radiant heaters. There are three process lines contained within the building (4582). The facility uses propane to fire this equipment. In response to new designs for ship modules, NNSB will conduct some casting of ship sections in Building 250 immediately adjacent and connected to Building 4582. Covered crucibles of melted lead will be moved by forklift from Building 4582 to Building 250, a distance of less than 200 feet. The melted lead will be poured into ship sections under ventilated hoods that exhaust to the outside through cartridge-type pre-filters and HEPA final filters designed for 99.9% efficiency. NNSB does not anticipate any increase in lead production and estimates that controlled emissions of particulate will be 1.0 pounds per year and controlled emissions of lead will be 0.2 pounds per year.

Woodworking Operations - Woodworking operations associated with the facility's primary function, shipbuilding, generally occur at two locations. The joiner shop occupies over 16,600 square feet and can fabricate small plugs to full-scale mock-ups of portions of ships for discussion and/or research and development. Building No. 3 primarily makes pallets, boxes,

and shoring timbers. Equipment used includes moulders, surfacers, saws, planers, lathes, boring machines and drills, shapers, and joiners in various sizes. The model shop is a smaller facility (2,400 square feet) used for fabrication of ships from wood, plastic, or Plexiglas. Full-scale models of these materials are used as training aids, for demonstrations, or for verification of design. Wood is also used to make some mold patterns on the second floor of Building 501 and produce pallets and shipping containers at Building 513.

Electroplating - The electroplating plant performs chrome, silver, zinc, cadmium, lead, copper, and nickel plating, chemical cleaning, pickling, stripping, buffing, and polishing. Chemical cleaning, pickling, stripping, buffing, and polishing are part of the cleaning and preparation of a substrate such as metal for electroplating. The electroplating process itself is the application of a metallic coat to a surface by passing an electric current through an electrolyte to form a surface with different properties than the original. The electrolyte is usually an aqueous solution of the salts of the metal being applied. Electroplating provides improved corrosion resistance, appearance, frictional characteristics, wear resistance and hardness, and specific electrical properties for ship hardware and parts.

Painting/Coating Operations - Painting/coating operations associated with the facility's primary function, shipbuilding, occur at various locations throughout the facility. Paint booths are located in the fabrication areas and numerous shops (e.g., machine, electric, and hull outfitting). Brush, roller, and touch-up applications occur in many operational areas. Outside painting occurs in areas such as dry docks, assembly platens, Quonset huts, in the open, under extemporaneous or semi-portable cover, inside, and outside of buildings. Paints are generally purchased in small containers (1 to 5 gallons) and then mixed (thinned, if needed) in 5 to 10-gallon paint pots. These pots feed spray gun applicators. In Buildings 274, 275, and 1746, pressurized totes ranging in capacity from 200 to 400 gallons are used. These units are closed-loop to minimize emissions. Unit cleaning is also done in the closed-loop mode. Thinners are purchased in 55-gallon containers. By utilizing relatively small containers rather than large storage tanks, NNSB can more effectively meet customer requirements and control quantities of potentially VOC and HAP-containing materials at the facility. The facility also houses a powder coating operation in Buildings 205 and 206.

Specialty Shops - Machine shops are located at various locations at the facility. Work at the various machine shops involves metal cleaning, machining, and fabrication of large plates, smaller parts, pipe cutting, and similar activities. Several buildings house very large lathes and milling equipment for turning large metal plates and other large parts. Particulate emissions from grinding and buffing of metal surfaces are exhausted to cyclones. In addition, the Main Machine Shop conducts hydraulic, hydro, air, or steam tests for all sizes of valves and large components. Dynamic balancing is performed on large rotors and ship propulsion shafting as well as most rotors (motors, turbines, and pumps) removed from ships. Piping is fabricated and assembled at the pipe fabrication facility. Equipment includes horizontal boring mills, standard and radial drill presses, lathes, automatic welding machines, standard pipe bending machines, a variable radius pipe roller-bender, and pipe threaders. Metal machining and surface preparation are also performed at the pipe fabrication facility. The main electrical shop is also located in this portion of the facility. A Baron Blakeslee vapor degreaser is used in the electrical shop for parts cleaning. It has been modified for the use of the non-HAP n-propylbromide. This substance is

not included in the halogenated solvents subject to 40 CFR Part 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. An enclosed, controlled arc gouging process is also in existence at the facility.

Storage Tanks - Storage tanks ranging in size from <1,000 gallons up to 60,000 gallons are located at the facility. Most tanks are used for storage of petroleum related materials including fuel oil, diesel fuel, waste oil, and oily wastewater. Some process related storage tanks are pressurized, e.g., varnish tanks. Totes (200 to 400 gallons), 55-gallon drums, and pots (5 to 10 gallons) are used for painting activities. Two gasoline distribution areas or service stations are located within the shipyard. The underground storage tanks serving these stations were upgraded within the last five years and include one 10,000-gallon tank, two 6,000-gallon tanks, and four 1,000-gallon tanks. NNSB utilizes propane for heaters, dryers, and ovens. Three large (30,000-gallon) storage tanks and one 70,000-gallon tank are used to supply these units. Natural gas is also used in some areas of the yard and is supplied by outside commercial suppliers through trunk lines.

Miscellaneous Activities - Other miscellaneous activities at the source with potential emissions include ovens and dryers, abrasive blasting, facility-wide solvent usage, facility-wide welding/brazing, facility-wide gluing, ship mock-ups, wastewater treatment, asbestos handling, shipboard foam installation applications, vessel cleaning, radionuclides, general plant activities (painting, welding, sandblasting, general carpentry, parts cleaning, vehicle maintenance, offset printing, blueprinting, copying, and firefighting), and research and development activities.

The facility is a Title V major source of PM and VOCs. This source is located in an attainment area for all pollutants, and is a PSD major source.

III. COMPLIANCE STATUS

The facility is inspected once or twice per year. The source has certified in the Title V application that the facility is currently in compliance with all existing requirements.

IV. EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Process Units

Emission Unit No.	Stack No	Unit Name/Description and Date of Construction	Size/Rated Capacity Units
550-E1	550-S1	Argon/Oxygen Degassing Furnace	30 tons/hr or 60,000 lbs/hr
550-E2	550-S2	Electric Arc Furnace No. 1	7.5 tons/hr or 15,000 lbs/hr
550-E3	550-S2	Electric Arc Furnace No. 2	25 tons/hr or 50,000 lbs/hr
550-E4	550-S2	Electric Arc Furnace No. 3	25 tons/hr or 50,000 lbs/hr

550-EF1	550-BV	Charging/Tapping Operations	30 tons/hr or 60,000 lbs/hr
550-EF2	550-BV	Pouring casting/Casting cooling Operation	30 tons/hr or 60,000 lbs/hr
550-EF3	550-EF3	Riser Burn Area	30 tons/hr or 60,000 lbs/hr
550-E5	550-BV	Shakeout Operations	30 tons/hr or 60,000 lbs/hr
550-E6	550-S6	Core Sand Dryer	10,000 lbs/hr or 1.4 mmBtu/hr
550-E8	550-S8	Heat Treating Oven	10,000 lbs/hr or 15.31 mmBtu/hr
550-E9	550-S9	Heat Treating Oven	10,000 lbs/hr or 23.22 mmBtu/hr
550-E10	550-S10	Abrasive Saw	12.5 tons/hr or 25,000 lbs/hr
550-E11	550-EF3	Sand Reclaim Operations	12.5 tons/hr or 25,000 lbs/hr
550-E12	550-S12	Riser Burn Area	30 tons/hr or 60,000 lbs/hr
550-E20	550-S20	Steel Shot Abrasive Blasting	30 tons/hr or 60,000 lbs/hr
550-E21	550-S21	Sawing, grinding, buffing, miscellaneous	30 tons/hr or 60,000 lbs/hr
555-E1	550-EF3	New Sand Operations	100 tons/hr or 200,000 lbs/hr
555-E2	555-S1 and S2	Electric Induction Furnace	4.25 tons/hr or 8,500 lbs/hr
555-E3	555-S1 and S2	Pouring Casting/Casting Cooling Operation	30 tons/hr or 60,000 lbs/hr
555-E4	555-S1 and S2	Abrasive Blasting	30 tons/hr or 60,000 lbs/hr
274-E1	Building vents	Abrasive Shot Blasting	26.25 tons/hour
275-E5	Building vents	Abrasive Shot Blasting	2.5 tons/hour
276-E3	276-S6	Wire Brush Paint Removal	<0.02 tons/hour
288-E1& E4	288-S1 and S2	Abrasive Blasting blast room and blasting area	2.5 tons/hour
288-E2	288-S3	Abrasive Blasting	2.5 tons/hour
288-E3	288-S3	Abrasive Blasting	2.5 tons/hour
1746-E1	1746-S1	Abrasive Blasting/Steel Shot	2.5 tons/hour
276-E3PC	Building vents	Plasma Cutting	<0.02 tons/hour
4582-E1	4582-S1, S2, and S3	Warwick Lead Melting Furnace, Model No. 550	1 ton/hour
4582-E2	4582-S1, S2, and S3	Warwick Lead Melting Furnace, Model No. 550	1 ton/hour
4582-E3	4582-S1, S2, and S3	Johnson Preheat Station, Johnston Manufacturing Co.	1 ton/hour
4582-E4	4582-S1, S2, and S3	Johnson Preheat Station, Johnston Manufacturing Co.	1 ton/hour
4582-E5	4582-S1, S2, and S3	Lead Contouring Hot Bench	1 ton/hour
4582-E6	4582-S1, S2, and S3	Lead Contouring Hot Bench	1 ton/hour
LS-E1	-	Lead School (training)	NA
3-E1	3-S1	Cutting/Planer/Re-saw	NA

501-E2	501-S2	Foundry Pattern Shop - wood cutting machines	NA
513-E1	513-S1	Warehouse No. 6 Saws	NA
PLATE-E1	PLATE-S1	Hard chromium electroplating tank	129 ft^3/hour
PLATE-E2	PLATE-S1	Decorative chromium electroplating tank	32 ft^3/hour
232-E1, E2	232-1S1 through 232-1S6, 232-2S	Consolidated Paint Facility, paint booths (2)	NA
4681-E2	4681-2S	Metal Finishing Bldg., paint booth (zinc phosphate coating line)	NA
4681-E3, E4	4681-3S, 4681-4S	Metal Finishing Bldg., paint booths (2)	NA
4701-E10 through 4701-E15	4701-10S through 4701-15S	Wire Spray Aluminum Facility, aluminum flame spray booths (6)	NA
4702-E1	4702-1S	Paint Spray Bldg., antenna paint booth	NA
4730-E9	Building vents	Grit Blast & Paint Facility, north paint room	NA
4730-E10	Building vents	Grit Blast & Paint Facility, south paint room	NA
P-SHIPSPRAY	NA	Outside Ship Painting	NA
P-SHIPBRUSH	NA	General facility-wide operations, brush, roller, and touch-up application on ships and ship parts	
P-FAC	NA	General facility-wide operations, brush, roller, and touch-up application on non-ship parts	NA
274-E13	274-13S	Plate Preparation & Inspection, paint booth	NA
275-E4	275-4S	Shape Preparation, paint booth	NA
275-E6	275-6S	Shape Preparation, paint booth	NA
276-E6	276-6S	Steel Fabrication Bldg., paint booth	NA
1746-E4	1746-4S	Plate Preparation & Inspection, paint booth	NA
61-E2	61-2S	Machine Shop, paint booth	NA
103-E2	103-2S	Maintenance Shop, paint booth	NA
64-E4, 64-E6, 64-E7	64-2S, 64-3S, 64-4S	Electric Shop, paint booths (3)	NA
609-E1	609-1S	Hull Outfitting Shop, paint booth	NA
64-E1	64-S1	Electrical Shop drill press/sander (not used for wood)	NA
64-E2	64-S2	Electrical Shop saw	NA
64-E9	64-S9	Grinding metal	NA
64-E5	Building vents	Electrical Shop - Baron-Blakeslee Model DP8-3636 vapor degreaser	NA
60-E2	60-S2	Grinding operations	NA
60-E3	60-S3	Buffing operations	NA
114-E1	114-S1	Saw metals	NA
5-E1	5-S1	Grinding metal	NA
FAC-PW	Building vents	Facility-wide parts washer operations	NA
FAC-BLST	NA	External abrasive blasting - facility-wide	NA
GRIT-E1	NA	Utility grit off-loading	NA

17-E20	17-S20	Abrasive blasting/sand and glass	NA
4730-E1 through 4730-E4	Building vents	Abrasive blasting/steel shot - north room	NA
4730-E5 through 4730-E8	Building vents	Abrasive blasting/steel shot - south room	NA
201-E1	201-S1	Abrasive blasting/steel shot	NA
Port-E1	Port-S1	Abrasive blasting/steel shot	NA
Port-E2 through Port E-3	Port-S2 through Port-S3	Abrasive blasting/utility grit	NA
Port-E4 through Port E-24	Port-S4 through Port-S24	Abrasive blasting/utility grit	NA
Port-E25	Port-S25	Abrasive blasting/utility grit	NA
Port-E26 through Port-E31	Port-S26 through Port-S31	Abrasive blasting/utility grit	NA
4701-E1 through 4701-E8	4701-S1 through 4701-S8	Abrasive blasting/aluminum oxide	NA
4701-E9	4701-S9	Abrasive blasting/steel shot	NA
1768-E1	1768-S1	Grinding/cutting/welding - Welding School	NA
FAC-WELD	NA	Welding - facilitywide	NA
250-E1	250-S1	Welding/lead caulking operations	NA
263-E1	263-S1	Welding operations	NA
4677-E1	4677-S1	Welding operations	NA
250-E2	NA	Arc gouger operations	NA
FAC-GLUE	NA	Gluing operations - facilitywide	NA
4619-E1	NA	Sludge dryer - electric	NA
501-E5	501-S5	Asbestos cutting	NA
75-E5	75-S5	Asbestos & non-asbestos cutting of gaskets	NA
74-E1	74-S1	Polyethylene cutting	NA
FAC-SOLV	NA	Solvent/thinner usage - facilitywide	NA
175-E1	NA	Fiberglass operations	NA
SS-E1 through SSE2	NA	Service stations - gasoline	NA
50-E1	50-S1	Wheelabrator Table	NA
5-E2	5-S2	Wheelabrator/Tumblast Machine	NA
25-E1	25-S1	Melamine Operations (2 Milling Machines, Band Saw, and Lathe)	NA
205-PDR	NA	Nordson Powder Booth	2,160 pounds per hour
205-B1 through B2	205-S1, 205-S2	Powder coating steel shot blast units (2)	NA

Title V Significant Unit Tanks

Tank Number	Contents	Capacity (gallons)	Year Installed
V700*	#6 Fuel Oil	124,203	1985
V701*	#6 Fuel Oil	124,203	1985
V702*	#6 Fuel Oil	93,884	1985
V703*	#6 Fuel Oil	93,884	1985
V704*	#6 Fuel Oil	60,373	1985
V705*	#6 Fuel Oil	60,373	1985

*"V" series tanks are on a floating barge "Vessel", but supply permitted boiler sources.

Combustion Units

Emission Unit No.	Stack No.	Emission Unit Description	Manufacturer and Date of Construction	Size/Rated Capacity (MMBTU/Hour)
FTSF-E1	FTSF-S1	No. 6 fuel oil-fired boiler, barge	Combustion Engineering Model V2M-8, pre-1983	213.26
FTSF-E2	FTSF-S2	No. 6 fuel oil-fired boiler, barge	Combustion Engineering Model V2M-8, pre-1983	213.26
78-E1	78-S1	Boiler #1, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
78-E2	78-S2	Boiler #2, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
78-E3	78-S3	Boiler #3, No. 6 fuel oil or recovered oil-fired boiler	B&W Integral Furnace, pre-1972	135
276-EF1	276-S2	Propane-fired furnace	Ray Campbell Furnace, construction date unknown	15.4
276-EF2	276-S3	Propane-fired furnace	Ray Campbell Furnace, construction date unknown	15.4
1278-E1	1278-S1	No. 2 fuel oil-fired oven, Northside	R.S. Annealing Oven, construction date unknown	20.79

Pollution Control Equipment

Emission Unit No.	Stack No.	Device Reference Number	Controlled Pollutant	Control Equipment Description1
550-E1	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E2	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E3	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E4	550-S1	550-C1	PM	Baghouse, Carborundum Model 264CT-2 (7 modules), 99.0% design control efficiency
550-E10	550-S10	550-C10	PM	Baghouse, Pangborn Type 456, 95.0% design control efficiency
550-E11	550-S11	550-C11	PM	Baghouse, Standard Havens Alpha Mark III, Size 24H, 95.0% design control efficiency
550-EF3	550-S11	550-C11	PM	Baghouse, Standard Havens Alpha Mark III, Size 24H, 95.0% design control efficiency
555-E1	550-S11	550-C11	PM	Baghouse, Standard Havens Alpha Mark III, Size 24H, 95.0% design control efficiency
550-E20	550-S20	550-C20	PM	Bag filter, 95.0% design control efficiency

1 Control equipment description is provided for descriptive purposes only. Options on type of required pollution control equipment may be exercised without a permit modification as long as the equipment complies with the appropriate applicable requirement.

550-E21	550-S21	550-C21	PM	Cyclone, 70.0% (estimated) control efficiency
274-E1	274-S1	274-C1	PM	Baghouse, Wheelabrator #19, Model 126D, 95.0% design control efficiency
275-E5	275-S5	275-C5	PM	Baghouse, Pangborn C70, Type CM, 95.0% design control efficiency
275-E8	275-S8	275-C8	PM	Filter (paper), 90.0% design control efficiency
288-E1 & 288-E4	288-S1 and 288-S2	288-C1	PM	Baghouses, Cox #10-2, Type T (2 units), 95.0% design control efficiency, each
288-E2 & 288-E3	288-S3	288-C2	PM	Baghouse, Cox #9-2, Type T (1 unit), 95.0% design control efficiency, each
4582-E1 through 4582-E6	4582-S1	4582-C1	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
4582-E1 through 4582-E6	4582-S2	4582-C2	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
LS-E1	LS-S1	LS-C1	PM	Baghouse, Standard Havens Alpha Mark III 18, 99.0% design control efficiency
3-E1	3-S1	3-C1	PM	Cyclone, 90.0% design control efficiency
501-E2	501-S2	501-C2	PM	Cyclone, 90.0% design control efficiency
513-E1	513-S1	513-C1	PM	Cyclone, 90.0% design control efficiency
PLATE-E1 through PLATE-E2	PLATE-S1	PLATE-C1	PM	Mechanical scrubber, Zenon packed tower scrubber, 98.0% design control efficiency
232-E1	232-1S1 through 232-1S6	232-1C	PM10	Water wash curtain, Binks Dynaprecipitator, 98.0% design control efficiency
232-E2	232-2S	232-2C	PM10	Water wash curtain, Binks Dynaprecipitator, 98.0% design control efficiency
4681-E2	4681-2S	4681-2C	PM10	Water wash curtain, Greenline Corporation, 98.0% design control efficiency
4681-E3	4681-3S	4681-3C	PM10	Water wash curtain, Greenline Corporation, 98.0% design control efficiency
4681-E4	4681-4S	4681-4C	PM10	Mechanical scrubber, mist eliminator, and filter (paper) in series, Greenline Corporation, 98.0% design control efficiency
4701-E12	4701-12S	4701-12C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E13	4701-13S	4701-13C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E14	4701-14S	4701-14C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E15	4701-15S	4701-15C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E10	4701-10S	4701-10C	PM10	Water wash curtain, 98.0% design control efficiency
4701-E11	4701-11S	4701-11C	PM10	Water wash curtain, 98.0% design control efficiency
4702-E1	4702-1S	4702-1C	PM10	Filter (paper), JBI Automatic Spray Booth, 90.0% design control efficiency
4730-E9	Building vents	4730-9C	PM10	Filter (paper), 90.0% design control efficiency

4730-E10	Building vents	4730-10C	PM10	Filter (paper), 90.0% design control efficiency
274-E13	274-13S	274-13C	PM10	Dry filter (paper), 90.0% design control efficiency
275-E4	275-4S	275-4C	PM10	Water wash curtain, Binks Water Curtain, 98.0% design control efficiency
275-E6	275-6S	275-6C	PM10	Water wash curtain, Binks Water Curtain, 98.0% design control efficiency
276-E6	276-6S	276-6C	PM10	Dry filter (paper), 90.0% design control efficiency
1746-E4	1746-4S	1746-4C	PM10	Filter (paper), Grief, Suenska Maslea, 90.0% design control efficiency
61-E2	61-2S	61-2C	PM10	Filter (paper), 90.0% design control efficiency
103-E2	103-2S	103-2C	PM10	Filter (paper), 90.0% design control efficiency
64-E2	64-2S	64-2C	PM10	Filter (paper), 90.0% design control efficiency
64-E3	64-3S	64-3C	PM10	Filter (paper), 90.0% design control efficiency
64-E4	64-4S	64-4C	PM10	Filter (paper), 90.0% design control efficiency
609-E1	609-1S	609-1C	PM10	Filter (paper), 90.0% design control efficiency
64-E1	64-S1	64-C1	PM	Baghouse, 95.0% design control efficiency
64-E2	64-S2	64-C2	PM	Baghouse, 95.0% design control efficiency
64-E9	64-S9	64-C9	PM	Cyclone, 90.0% design control efficiency
60-E2	60-S2	60-C2	PM	Cyclone, 90.0% design control efficiency
60-E3	60-S3	60-C3	PM	Cyclone, 90.0% design control efficiency
114-E1	114-S1	114-C1	PM	Baghouse, 95.0% design control efficiency
5-E1	5-S1	5-C1	PM	Cyclone, 90.0% design control efficiency
17-E20	17-S20	17-C20	PM	Baghouse, 95.0% design control efficiency
4730-E1 through 4730-E4	Building vents	4730-C1 through 4730-C4	PM	Baghouses (4 units), 95.0% design control efficiency, each
4730-E5 through 4730-E8	Building vents	4730-C5 through 4730-C8	PM	Baghouses (4 units), 95.0% design control efficiency, each
201-E1	201-S1	201-C1	PM	Baghouse, Wheelabrator Dustube Model 112-AC, 95.0% design control efficiency
Port-E1	Port-S1	Port-C1	PM	Baghouse, Standard Havens 12SH Alpha Mark III, 95.0% design control efficiency
Port-E2 through Port-E3	Port-S2 through Port-S3	Port-C2 through Port-C3	PM	Baghouse, Torrit Model MTD-48-LD, 95.0% design control efficiency
Port-E4 through Port-E24	Port-S4 through Port-S24	Port-C4 through Port-C24	PM	Baghouses (21 units), Vaculblast Co. Model D6 or D6S-8W, 95.0% design control efficiency, each
Port-E25	Port-S25	Port-C25	PM	Baghouse, MISCO/IPEC custom-made unit, 95.0% design control efficiency
Port-E26 through Port-E31	Port-S26 through Port-S31	Port-C26 through Port-C31	PM	Baghouses (6 units), MISCO/IPEC custom-made units, 95.0% design control efficiency, each
Port-L-E1	Port-L-S1	Port-L-C1	PM	Cartridge dust collectors
Port-L-E2	Portl-L-S2	Port-L-C2	PM	Cartridge dust collectors
4701-E1 through 4701-E8	4701-S1 through 4701-S8	4701-C1 through 4701-C8	PM	Baghouses (8 units), MISCO/IPEC custom-made units, 95.0% design control efficiency, each

4701-E9	4701-S9	4701-C9	PM	Baghouse, Model SS-800E, and Cyclone, Industrial Cleaning Machines, 95.0% design control efficiency, each
276-E3	276-S6	276-C3	PM	Torit dust collector, 95% design control efficiency
1768-E1	1768-S1	1768-C1	PM	Cyclone, 90.0% design control efficiency
250-E1	250-S1	250-C1	PM	Fabric filter, Portable Hawley TRAV-L vent fabric filter with HEPA filter dust collector, 95.0% design control efficiency
263-E1	263-S1	263-C1	PM	Fabric filter, Portable Hawley TRAV-L vent fabric filter with HEPA filter dust collector, 95.0% design control efficiency
4677-E1	4677-S1	4677-C1	PM	Baghouse, 95.0% design control efficiency
501-E5	501-S5	501-C5	PM	Fabric filter, design control efficiency unknown
205-B1 through B2	205-S1 and 205-S2	205-C1	PM	Pangborn PC2-4, design control efficiency 99.9%; BCP Wheelabrator, 4 JPSC 24, 99.9% design control efficiency
206-C1	206-S1	206-C1	VOC	Direct Flame Afterburner, Steelman 4.56.54 BA-C, 99.0% design control efficiency
5-E2	5-S2	5-C2	PM	Pangborn Baghouse, Model 25-5-8, Type HP-1, 95.0% design control efficiency
50-E1	50-S1	50-C1	PM	Wheelabrator Baghouse Dustube, Model 112-AC, 95.0% design control efficiency
25-E1	25-S1	25-C1	PM	Torit Baghouse, 95.0% design control efficiency
75-E5	75-S5	75-C5	PM	Dust Collector work bench, Torrit Model DD or Model 130, design control efficiency unknown
74-E1	74-S1	74-C1	PM	Baghouse, 95.0% design control efficiency

V. EMISSIONS INVENTORY

A copy of the 1997 annual emission update is attached as Attachment A. Emissions are summarized in the following table.

1997 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO_2	PM_{10}	NO_x
Facilitywide	573.3	na	1,757.3	153.4	360.2
Total	573.3	na	1,757.3	153.4	360.2

VI. EMISSION UNIT APPLICABLE REQUIREMENTS - Facilitywide Limitations

Combustion Units are subject to the existing source rules for SO_2 and PM in 9 VAC 5-40-900 and 9 VAC 5-40-930. Several boilers (Units FTSF-E1, FTSF-E2, 78-E1, 78-E2, and 78-E3) have SO_2 limits and limits on fuel sulfur content from a permit dated 1/13/85. The opacity standards of 9 VAC 5-40-80 apply to the combustion units. Opacity requirements for Units FTSF-E1 and FTSF-E2 do not apply. These barge-mounted units provide power to test aircraft carriers in lieu of nuclear power. They fall under 9 VAC 5-40-5680 - Other Mobile Sources, and as such, have historically been exempted from opacity requirements under 9 VAC 5-40-5680.C (a) and (b). The permittee calculated maximum SO_2 and PM-10 emissions from the combustion units and compared those emissions to the SO_2 limitations in either 9 VAC 5-40-930 or the permit dated 1/13/85 as applicable and to the PM-10 limitations from 9 VAC 5-40-900. Based on the following calculations, NNSB will be required to maintain records of fuel purchases including fuel sulfur and ash content per shipment and monthly fuel throughput. Compliance with fuel sulfur and annual fuel throughput limitations shall determine compliance with the SO_2 and PM-10 limitations in the permit. No additional requirements (other than opacity) have been established for the small combustion units 276-EF1, 276-EF2, and 1278-E1 since calculations below demonstrate compliance with both the SO_2 and PM emission limitations in 9 VAC 5-40-900 and 930. The permittee is also required to perform a monthly EPA Reference Method 9 evaluation of the large boiler stacks (Units 78-E1, 78-E2, and 78-E3 with the exception of Units FTSF-E1 and FTSF-E2) once per month to ensure compliance with the applicable opacity standard. The smaller units (276-EF1, 276-EF2, and 1278-E1) are required to undergo an informal opacity evaluation once per month when the units are in operation and record the results in a logbook.

Units FTSF-E1, FTSF-E2, 78-E1, 78-E2, 78-E3 SO_2 limitation = 2.23 lbs/mmBtu (permit dated 1/13/85)
Units FTSF-E1 and FTSF-E2 Maximum Capacity = 426.52 mmBtu/hr combined, 2,844 gal/hr combined.
SO_2 Emission Factor = 157(S) lbs/1000 gallons No. 6 fuel oil; Table 1.3-1, AP-42, 5th Edition, Vol. 1.
Max. SO_2 Emissions (lbs/mmBtu) = 157(2.1) lbs SO_2/1000 gal x 2,844 gal/hr = 937.7 lbs SO_2/hr; 937.7 lbs SO_2/hr/426.52 mmBtu/hr = 2.198 lbs/mmBtu

Units 78-E1 through E-3 Maximum Capacity = 596 mmBtu/hr combined, 3,973 gal/hr combined.
Max. SO_2 Emissions (lbs/mmBtu) = 157(2.1)/1000 x 3,973 = 1,309.9/596 = 2.198 lbs/mmBtu

Units FTSF-E1, FTSF-E2, 78-E1, 78-E2, 78-E3 PM limitation $=1.0906H^{-0.2594}$ lbs/mmBtu (9 VAC 5-40-900), where H = rated capacity in mmBtu/hr
PM limitation = $1.0906(596+426.52)^{-0.2594}$ = 0.18 lbs/mmBtu
PM Emission Factor = 9.19(S)+3.22 lbs/1000 gallons No. 6 fuel oil; Table 1.3-1, AP-42, 5th Edition, Vol. 1.
Max. PM Emissions (lbs/mmBtu) = 9.19(2.1)+3.22/1000 x (3,973+2,844) = 153.5/(596+426.52) = 0.15 lbs/mmBtu

Units 276-EF1, 276-EF2, 1278-E1 SO_2 limitation = 2.64 lbs/mmBtu (9 VAC 5-40-930, Rule 4-8)
SO_2 Emission Factor = 142(S) lbs/1000 gallons distillate oil; Table 1.3-1, AP-42, 5th Edition, Vol. 1.
Units 276-EF1, 276-EF2, 1278-E1 Maximum Capacity = 51.5 mmBtu/hr combined, 368 gal/hr combined.
Max. SO_2 Emissions (lbs/mmBtu) = 142(2.1)/1000 x 368 = 109.7/51.5 = 2.13 lbs/mmBtu

Units 276-EF1, 276-EF2, 1278-E1 PM limitation =$1.0906H^{-0.2594}$ lbs/mmBtu (9 VAC 5-40-900), where H = rated capacity in mmBtu/hr
PM Limitation = $1.0906(51.5)^{-0.2594}$ = 0.392 lbs/mmBtu
PM Emission Factor = 2 lbs/1000 gallons distillate oil; Table 1.3-1, AP-42, 5th Edition, Vol. 1.
Max. PM Emissions (lbs/mmBtu) = 2/1000 x 368 = 0.736 lbs/hr/51.5 = 0.014 lbs/mmBtu

Foundry operations were in existence prior to 1972, therefore, no permits were needed. A permit for the Argon/Oxygen Degassing furnace was obtained in 1978 but that permit contains no operational, production, or emissions limitations. 40 CFR 60 Subparts AA - Standards of Performance for Steel Plants: Electric Arc Furnaces applies to sources constructed between 10/21/74 and 8/17/83. This standard is not applicable since the electric arc furnaces at the facility were constructed prior to 1972. 40 CFR 60 Subpart AAa - Standards of Performance for Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels applies to source constructed after 8/17/83. The Argon/Oxygen Degassing furnace was permitted in 1978 therefore this standard does not apply. The foundry is subject to the PM standards in Rule 4-18 for Primary and Secondary Metal Operations. A calculation of maximum PM emissions from the foundry operations and a comparison of those emissions to the PM limitations from 9 VAC 5-40-2410 demonstrate compliance with the standards (see calculations below). The SO_2 standards in Rule 4-18 do not apply to the foundry operations since only steel is processed and not copper, zinc, or lead.

Unit No.	Process Equipment Description	Rated Capacity	AP-42 Emission Factor	Uncontrolled Emissions (lbs/hr)	Control Efficiency (%)	Max. Controlled Emissions (lbs/hr)	Max. Allowable Emissions[4] (lbs/hr)
550-E1	Argon/oxygen degassing furnace	30 tons/hr or 60,000 lbs/hr	13 lb/ton*	390	99	3.9	42.00
550-E2	EAF No. 1	7.5 tons/hr or 15,000 lbs/hr	13 lb/ton*	97.5	99	0.975	20.875
550-E3	EAF No. 2	25 tons/hr or 50,000 lbs/hr	13 lb/ton*	325	99	3.25	42.00
550-E4	EAF No. 3	25 tons/hr or 50,000 lbs/hr	13 lb/ton*	325	99	3.25	42.00
550-EF1	Charging/tapping operations	30 tons/hr or 60,000 lbs/hr	1.4 lb/ton*	42	0	42	42.00
550-EF2	Pouring/casting/cooling	30 tons/hr or 60,000 lbs/hr	4.2 lb/ton*	126	70	37.8	42.00
550-EF3	Riser burn area	30 tons/hr or 60,000 lbs/hr	2.6 lb/ton[1]	78	95	3.9	42.00
550-E5	Shakeout operations	30 tons/hr or 60,000 lbs/hr	3.2 lb/ton**	96	70	28.8	42.00

550-E6	Core sand dryer (LPG)	10,000 lbs/hr or 1.4 mmBtu/hr	0.4 lb/10^3 gal[(2)]	0.56	0	0.56	16.65
550-E8	Heat treating oven (LPG)	10,000 lbs/hr or 15.31 mmBtu/hr	0.6 lb/10^3 gal[(2)]	9.19	0	9.19	16.65
550-E9	Heat treating oven (LPG)	10,000 lbs/hr or 23.22 mmBtu/hr	0.6 lb/10^3 gal[(2)]	13.93	0	13.93	16.65
550-E10	Abrasive saw	12.5 tons/hr or 25,000 lbs/hr	2.6 lb/ton[(1)]	32.5	95	1.625	27.00
550-E11	Sand reclaim operations	12.5 tons/hr or 25,000 lbs/hr	6 lb/ton sand*	75	95	3.75	27.00
550-E12	Riser Burn Area	30 tons/hr or 60,000 lbs/hr	2.6 lb/ton[(1)]	78	95	3.9	42.00
550-E20	Steel shot abrasive blasting	30 tons/hr or 60,000 lbs/hr	2.6 lb/ton[(1)]	78	95	3.9	42.00
550-E21	Sawing, grinding, buffing, misc.	30 tons/hr or 60,000 lbs/hr	2.6 lb/ton[(1)]	78	70	23.4	42.00
555-E1	New sand operations	100 tons/hr or 200,000 lbs/hr	6 lb/ton sand*	600	95	30.0	42.00
555-E2	Electric induction furnace	4.25 tons/hr or 8,500 lbs/hr	0.5 lb/ton[(3)]	2.125	0	2.125	14.90
555-E3	Pouring/casting/cooling	30 tons/hr or 60,000 lbs/hr	4.2 lb/ton*	126	70	37.8	42.00
555-E4	Abrasive blasting	30 tons/hr or 60,000 lbs/hr	2.6 lb/ton[(1)]	78	95	3.9	42.00

*AP-42, Table 12.13-2, 5th Edition, Vol. 1
**AP-42, Table 12.10-7, 5th Edition, Vol. 1
[(1)]AP-42, Table 13.2.6-1, 5th Edition, Vol. 1
[(2)]AP-42, Table 1.5-1, 5th Edition, Vol. 1
[(3)]AP-42, Table 12.10-3, 5th Edition, Vol. 1
[(4)]Standard for Particulate Matter, 9 VAC 5-40-2410

Steel Preparation and Fabrication Operations are subject to the PM standards of 9 VAC 5-40-260 and the opacity standards of 9 VAC 5-40-320 referencing 9 VAC 5-40-60. Calculations of maximum PM emissions from the Steel Preparation and Fabrication Operations are compared those emissions to the PM limitations from 9 VAC 5-40-260. The calculations demonstrate compliance with the particulate matter standards. Compliance with the opacity standards shall be determined by monthly informal visible emissions evaluations. The calculations are outlined as follows:

Unit No.	Process Equipment Description	Rated Capacity	AP-42 Emission Factor	Uncontrolled Emissions (lbs/hr)	Control Efficiency (%)	Max. Controlled Emissions (lbs/hr)	Max. Allowable Emissions[(1)] (lbs/hr)
274-E1	Abrasive Shot Blasting	26.25 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	68.25	95	3.4125	36.61
275-E5	Abrasive Shot Blasting	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58

276-E3	Wire Brush Paint Removal	<0.02 tons/hour	Exempt*	Exempt*	Exempt*	Exempt*	Exempt*
288-E1 & E4	Abrasive Blasting	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58
288-E2	Abrasive Blasting	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58
288-E3	Abrasive Blasting	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58
1746-E1	Abrasive Blasting/Steel Shot	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58
276-E3PC	Plasma Cutting	<0.02 tons/hour	Exempt*	Exempt*	Exempt*	Exempt*	Exempt*
4562-E2PC	Plasma Cutting	<0.02 tons/hour	Exempt*	Exempt*	Exempt*	Exempt*	Exempt*
4730-E1 - E8	Abrasive Blasting/Steel Shot	2.5 tons/hour	1.3 lbs/1000 lbs abrasive[(2)]	6.5	95	0.325	7.58

*Exempt from the particulate standard of 9 VAC 5-40-260.A. based on capacity, <0.05 tons/hour.
[(1)]Particulate standard, Table 4-4A, 9 VAC 5-40-260.A.
[(2)]AP-42, Table 13.2.6-1, 5th Edition, Vol. 1. Note: steel shot PM-10 emission factor estimated at 10% of the sand blast media emission factor of 13-lbs/1000 lbs sand.

Secondary Lead Processing capacity is 1500 tons per year. This is the basis for PM emission limitations from the process weight rate tables in Rule 4-18 (9 VAC 5-40-2410.A.). However, PM emission limitations in the 12/16/81 permit are more stringent than those calculated in Rule 4-18 and are included in the permit. Emission factors for casting have been used since the furnaces are not blast furnaces but melting furnaces. According to AP-42 Chapter 12.11, potential emissions from melting furnaces are negligible. A compliance demonstration is outlined below:

Unit No.	Process Equipment Description	Rated Capacity	AP-42 Emission Factor	Uncontrolled Emissions (lbs/hr)	Uncontrolled Emissions (tons/yr)	Max. Allowable Emissions (lbs/hr)	Max. Allowable Emissions (tons/yr)
4582-E1 through 4582-E6	Secondary Lead Processing Units, combined	1.0 ton/hour; 1,500 tons/year	0.04 lbs PM/ton[(1)]	0.04 lbs/hr PM	0.03 tons/yr PM	0.60 lbs/hr PM	2.4 tons/yr PM
4582-E1 through 4582-E6	Secondary Lead Processing Units, combined	1.0 ton/hour; 1,500 tons/yr	0.01 lbs Lead/ton[(1)]	0.01 lbs/hr Lead	0.0075 ton/yr Lead	0.20 lbs/hr Lead	0.9 tons/yr Lead

[(1)]AP-42, Table 12.11-2, 5th Edition, Vol. 1.

Woodworking operations are subject to Rule 4-17 (9 VAC 5-40-2270 B) particulate standards. Woodworking operations are controlled by 90% efficient cyclones. The facility cuts very large timbers for shoring as well as smaller pieces for mock-ups that result in larger particles being emitted which are collected by the cyclones. The permit requires a weekly visible emissions

evaluation from the stacks of the cyclones. Visible emissions from the cyclone stacks should be non-existent based on the particle size distribution and the design control efficiencies of the cyclones. Therefore, proper operation of the cyclones and imposing a no visible emissions action level on the source should suffice for compliance with the 0.05 grains per standard cubic feet of exhaust gas standard in Rule 4-17 (9 VAC 5-40-2270).

Electroplating - Only the hard **chromium electroplating** tanks (PLATE-E1 and PLATE-E2) are subject to 40 CFR 63.340 Subpart N. 40 CFR 63.340(c) states that "process tanks associated with a chromium electroplating or chromium anodizing process, but in which neither chromium electroplating nor chromium anodizing is taking place, are not subject to the provisions of this subpart. Examples of such tanks include, but are not limited to, rinse tanks, etching tanks, and cleaning tanks. Likewise, tanks that contain a chromium solution, but in which no electrolytic process occurs, are not subject to this subpart. An example of such a tank is a chrome conversion coating tank where no electrical current is supplied." Therefore, Units PLATE-E4 through PLATE-E22 are not subject to the provisions of 40 CFR 63 Subpart N. Initial compliance demonstrations under Subpart N for the two tanks have been completed. The initial compliance date for the decorative chromium electroplating tank was January 25, 1996, and for the hard chromium electroplating tank, January 25, 1997. Initial performance tests using the procedures and calculations of 40 CFR 63.344(e)(4) were completed and submitted to EPA and DEQ with the measurements and calculations used to determine compliance by the applicable due dates. Initial compliance tests indicated the values of inlet pressure velocity and pressure drop across the scrubber that correlated with compliance with chromium emission limitations in Table C.6.a. The permittee will be required to monitor the scrubber once per day for inlet pressure velocity and pressure drop across the scrubber for comparison with initial compliance test values. The permittee shall maintain a record of the initial compliance test values on-site for inspection by DEQ. In addition, and Operation and Maintenance (O&M) Plan was completed and is now part of the operating manual for the electroplating facility.

Painting and Coating Operations - 40 CFR 63 Subpart II is the Shipbuilding and Ship Repair NESHAP and contains provisions for controlling volatile organic hazardous air pollutants (VOHAP) from shipbuilding and ship repair coatings. Compliance shall be determined through application of the specific subpart requirements (40 CFR 63.785). **Painting operations** are also subject to the VOC standards of 9 VAC 5-40-4780 A. A permit dated 1/12/86 covers two of the Aluminum Flame Spray Facility water curtain booths (Units 4701-E10 and 4701-E11). The permit limits VOC emissions to 40 lbs/day, 8 lbs/hr, and 7 tons/year. The regulatory reference governing these limitations is 9 VAC 5-50-260. The permittee is required to maintain usage records and calculate VOC emissions daily. The powder coating facility is covered by the permit dated 7/10/2000. The powder coating permit has a throughput limitation that has been carried forth to the Title V permit. Conditions from the 7/10/00 permit related to insignificant equipment (Conditions 5, 6, 7, 8, 10, and 11) are not included in the Title V permit.

Specialty shop operations including grinding, drilling, and sawing are subject to Rule 4-4 (9 VAC 5-40-260) particulate standards. Operations related to parts washing and degreasing are subject to the VOC Control Technology Guideline (CTG) standards in Rule 4-24 (9 VAC 5-40-3290). Compliance with the VOC standards is demonstrated by compliance with the specific CTG requirements in 9 VAC 5-40-3290.C. Compliance with the particulate matter standards of Rule 4-4 shall be demonstrated through weekly visible emissions evaluations. A no visible

emissions condition shall be considered indicative of compliance with the particulate standards. A permit dated 9/2/94 covers the arc gouging process. Compliance with the arc gouger PM limitation shall be demonstrated through the use of a Torit dust collector with an associated 5% opacity limitation and a throughput limitation on linear feet per year of stainless steel. The permittee is required to monitor visible emissions from the dust collector once per week while the arc gouger is in operation and record the evaluations in a logbook.

Each of the facility's **storage tanks** is exempt from the requirements of 40 CFR 60.110b Subpart Kb and 9 VAC 5-40-3410 based on either tank capacities or vapor pressures of stored liquids.

Monitoring, Recordkeeping, and Reporting

Monitoring for the combustion units shall consist of maintaining records of fuel throughput, type of fuel used, and appropriated data on fuel properties. The permittee shall be required to monitor opacity from each of the combustion units utilizing EPA Method 9 once per month. No additional monitoring is required since the source has demonstrated compliance with the emission limitations by calculations. An annual emission report shall be submitted to DEQ. The source shall maintain records of all No. 6 fuel oil purchased indicating sulfur content per shipment.

Foundry operations - the permittee shall monitor opacity utilizing EPA Method 9 once per month. No emission monitoring is required since the source has demonstrated compliance with the limitations by calculations. The permittee shall maintain records of the monthly and annual throughput of steel scrap calculated monthly as the sum of each consecutive 12-month period. No additional reports are required other than those required in the facilitywide general conditions.

Steel Fabrication - the permittee shall monitor opacity utilizing EPA Method 9 once per month. No emission monitoring is required since the source has demonstrated compliance with the limitations by calculations. The source is required to maintain records of the monthly and annual throughput of steel in tons calculated as the sum of each consecutive 12-month period. No additional reports are required other than those required in the facilitywide general conditions.

Secondary Lead Processing - the permittee shall monitor opacity utilizing EPA Method 9 once per month. No emission monitoring is required since the source has demonstrated compliance with the limitations by calculations. The source is required to maintain records of the daily, monthly, and annual throughput of lead in tons calculated as the sum of each consecutive 12-month period. No additional reports are required other than those required in the facilitywide general conditions.

Woodworking - the permittee shall make an observation of opacity once per week and record the findings in a logbook. No emission monitoring is required since the source will demonstrate compliance with the limitations by visible emission evaluations and cyclone structural integrity evaluations. No additional reports are required other than those required in the facilitywide general conditions.

Electroplating - the permittee shall comply with the monitoring, recordkeeping, and reporting provisions of 40 CFR 63.342, 63.343, and 63.347 as specified in the Title V permit.

Painting/Coating - the permittee shall monitor opacity utilizing EPA Method 9 once per month for the powder coating facility. The permittee shall comply with the monitoring, recordkeeping, and reporting provisions of 40 CFR 63.783, 63.785, and 63.788. In addition, the permittee shall maintain records of daily total paint and coating usage in gallons including VOC content as applied per coating for Units 4701-E10 and E-11. The permittee shall calculate VOC emissions in pounds per hour and pounds per day once per calendar day and use such calculations to calculate annual VOC emissions as the sum of each consecutive 12-month period for Units 4701-E10 and E11. The permittee shall maintain such calculation records for 5 years.

Specialty Shops - the permittee shall evaluate opacity once per week for each of the specialty shop units and maintain records of each evaluation. No emission monitoring is required since it is expected that the source will demonstrate compliance with the limitations by maintaining a no visible emissions condition at all times. The source is required to monitor parts washers weekly to ensure compliance with the control requirements of 9 VAC 5-40-3290 C. In addition, records of the annual throughput of stainless steel catapult plates for the arc gouger, waste solvent disposal records, inspection and corrective action records for the parts washers, and dust collector pressure drop records shall be maintained at the facility for inspection. No additional reports are required other than those required in the facilitywide general conditions.

Storage Tanks - no monitoring, recordkeeping, or reporting requirements have been applied for the facility's storage tanks.

Testing

The permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Streamlined Requirements

This permit does not contain any streamlined requirements.

VII. GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

VIII. STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

9 VAC 5-50-310, Odorous Emissions
9 VAC 5-50-320, Toxic Pollutants

IX. FUTURE APPLICABLE REQUIREMENTS

The Compliance Assurance Monitoring (CAM) Rule in 40 CFR Part 64 may apply at permit renewal to the particulate emissions from the Foundry Operations. Newport News Shipbuilding will submit the required information under 40 CFR 64.4 upon renewal of the operating permit.

Newport News Shipbuilding will comply with the requirements of 40 CFR Part 82, Subpart F which requires that emissions of substances that deplete stratospheric ozone be curtailed to the maximum extent possible through recycle and the use of certified maintenance technicians.

X. INAPPLICABLE REQUIREMENTS

40 CFR 60 Subpart Kb does not apply to any of the tanks at the facility. Each tank is exempted from the provisions of this subpart and from the provisions of 9 VAC 5-40-3410 based on either tank capacities or vapor pressures of stored liquids.

XI. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
103-E1	Shop, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
160-E1	Tool Room & Office, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
1744-E2	Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	979 horsepower
1744-E3	Utility Substation Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	469 horsepower
1744-E4	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	2.343 mmBtu/hr
1744-E5	Natural gas-fired boiler	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	2.343 mmBtu/hr
23-E1	Hull Outfitting & Electrical Shops, Perkins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
2-E1	Consolidated Storage, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
4538-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,048 horsepower
4632-E1	Radcon Control Firehouse, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	324 horsepower
4677-E2	MOF, South, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	80 horsepower
4677-E3	MOF, North, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67 horsepower
4677-E4	MOF, East, Detroit Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	47 horsepower
520-E1	Office, Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67 horsepower
521-E1	Computer & Materials Support, Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	603 horsepower
521-E2	Computer & Materials Support, Solar Gas Turbine (diesel-fired for emergency use)	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,073 horsepower
86-E1	Perkins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	235 horsepower

DD10/11-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	469 horsepower
DD12-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	757 horsepower
DD3/4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
DD3-E1	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	335 horsepower
DD3-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	335 horsepower
DD4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	208 horsepower
DD4-E2	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	208 horsepower
FTSF-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	670 horsepower
GEN-E1	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
GEN-E10	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	282 horsepower
GEN-E11	Fire Dept. #1-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	268 horsepower
GEN-E12	Fire Dept. #2-port, Caterpillar Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	268 horsepower
GEN-E13	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	188 horsepower
GEN-E14	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	168 horsepower
GEN-E15	Diesel-fired Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	168 horsepower
GEN-E16	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	80 horsepower
GEN-E2	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
GEN-E17	Communications Tower, Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	282 horsepower
GEN-E18	Portable, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	282 horsepower
GEN-E19	Scrap Yard Fuel Storage Facility, Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	46.9 horsepower
GEN-E20	Ring Module Shop, Denerac Diesel Generator Set	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40.2 horsepower
GEN-E21	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	978.9 horsepower
GEN-E22	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67.1 horsepower
GEN-E23	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67.1 horsepower

GEN-E24	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	11 horsepower
GEN-E25	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	11 horsepower
GEN-E26	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67.1 horsepower
GEN-E27	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40.2 horsepower
GEN-E28	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40.2 horsepower
GEN-E29	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
GEN-E3	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
GEN-E30	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
GEN-E31	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	40 horsepower
GEN-E32	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	67 horsepower
GEN-E33	Emergency Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	93.9 horsepower
GEN-E4	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	871.7 horsepower
GEN-E5	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	603.5 horsepower
GEN-E6	Cummins/Onan Diesel Generator Set	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	402 horsepower
GEN-E7	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	335 horsepower
GEN-E8	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	335 horsepower
GEN-E9	Cummins Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	308 horsepower
PIER2-E1	Cummins Diesel Emergency Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	469 horsepower
SHED4-E1	Caterpillar Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	737 horsepower
GEN-E34	Detroit Diesel Generator	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	47 horsepower
GENP-E1	Portable Generators Rated at equal to or greater than 14 kW	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	<12 horsepower
GEN4636-E2	Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	740 horsepower
PUMP-E1	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	95.2 horsepower
PUMP-E2	Cummins 6" Portable Emergency Diesel Pump	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	95.2 horsepower
NAC-E1	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower

NAC-E2	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E3	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E4	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E5	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E6	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E7	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E8	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E9	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E10	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E11	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
NAC-E12	Caterpillar 3512 Diesel Air Compressor	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1,475 horsepower
550-E12	R.S. Products Co. Oven, Foundry Annealing	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	9.74 million Btu/hour, propane
550-E14	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.305 million Btu/hour, propane
550-E15	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.2 million Btu/hour, propane
550-E16	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	2.7 million Btu/hour, propane
550-E17	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	2.7 million Btu/hour, propane
550-E18	Heat Treating Oven, Foundry	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	2.7 million Btu/hour, propane
550-E6	Core Sand Dryer	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.4 million Btu/hour, propane
274-E2	Binks Dryer, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.9 million Btu/hour
274-E3	Binks Dryer, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	2.4 million Btu/hour
274-E4	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.88 million Btu/hour
274-E5	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.56 million Btu/hour
274-E6	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.56 million Btu/hour
274-E7	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.88 million Btu/hour

274-E8	Buffalo Forge-Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.562 million Btu/hour
274-E9	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.4 million Btu/hour
274-E10	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.4 million Btu/hour
274-E11	Wing Heat - Space Heating Plat Prep. Inspection, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	0.4 million Btu/hour
275-E1	Thermal Dryer, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	3.2 million Btu/hour
275-E2	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.88 million Btu/hour
275-E3	Buffalo Forge - Shape Prep, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	1.88 million Btu/hour
276-E5	Oven, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	2.58 million Btu/hour
1746-E1	Electrolux Paint Dryer - Plate Preparation	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	8.33 million Btu/hour
1746-E3	Oven, Plate Prep, propane	5-80-720 C.4.b.	NO_x, SO_2, VOC, PM, CO	8.33 million Btu/hour
4582-E7	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.023 million Btu/hour
4582-E8	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.023 million Btu/hour
4582-E9	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.023 million Btu/hour
4582-E10	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.023 million Btu/hour
4582-E11	Lead Finishing Radiant Heater	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.023 million Btu/hour
17-E2	Super heater - Ship Repair Machine Shop	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.6 million Btu/hour
60-E4	Curing Oven - Main Machine Shop (w/filter)	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.175 million Btu/hour
64-E3	Bayco Oven	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1.0 million Btu/hour
205-E1	Oven - Ship Shed No. 3	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.214 million Btu/hour
4740-E1	Oven	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.183 million Btu/hour
4702-EF2	Dryer	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	1.1 million Btu/hour
205-C1a, 205-C1b, 205-C1c	Parts Washer Burners	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	One burner rated at 2.0 million Btu/hour and two burners rated at 1.3 million Btu/hour each
205-C2	Pre-heat Oven	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	5.5 million Btu/hour
205-C3	Cure Oven	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	5.5 million Btu/hour

206-C1	Heat Cleaning Oven	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	0.6 million Btu/hour
4681-E1	Bake Oven at Phosphate Line	5-80-720 C.4.b.	CO, NO_x, SO_2, VOC, PM10	4.2 million Btu/hour
PLATE-E4	Chromium strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E5	Electrocleaner tank - Cd	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E6	Electrocleaner tank - Cu/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E7	Electrocleaner tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E8	Electrocleaner tank - Cr	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E9	Electropolisher tank - Cr/Ni	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E10	Chromic acid tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E11	Cadmium plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E12	Barrel cadmium plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E13	Zinc plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E14	Barrel zinc plating	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E15	Cyanide copper tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E16	Nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E17	Nickel strip tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E18	Dull nickel plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E19	Lead plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E20	Silver strike tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E21	Silver plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA
PLATE-E22	Acid copper plating tank	5-80-720 B.2.	Metallic oxides, hydrogen and inorganic compounds of hydrogen	NA

Title V Insignificant Unit Tanks

Tank Number	Contents	Capacity (gallons)	Year Installed
A109	Tectyl 891	8,500	Portable
A203	Diesel	6,000	1990
A208	Diesel	300	1991
A209	Diesel	1,000	1993
A210	Diesel	1,000	1993
A211	Diesel	180	1972
A212	Diesel	270	1982
A218	Diesel	3,000	1995
A219	Diesel	1,000	1995
A220	Diesel	2,200	1996
A221	Diesel	1,000	2001
A301	Recd Oil	19,827	***1985***
A302	Recd Oil	19,827	***1985***
A401	Oily waste	60,000	***1985***
A402	Oily waste	60,000	***1985***
A403	Oily waste	8,310	1985
A508	Diesel	530	1995
A509	Diesel	530	1995
A510	Diesel	530	1995
A511	Diesel	270	1995
A512	Diesel	270	1995
A513	Diesel	270	1995
A514	Jet fuel	2,000	Portable
A601-A635	Oily waste	910 each	Portable
V706*	Diesel	500	1985
V707*	Oily waste	10,000	1985
U209	Diesel	1,500	1984
U217	Diesel	6,000	1976
U219	Diesel	5,000	1976
U232	Diesel	1,000	1993
U233	Diesel	1,000	1993
U305	Gasoline	6,000	1979
U306	Gasoline	10,000	1991
U500	Hydraulic	6,000	1979
U502	Motor oil	6,000	1979
U503	#6 fuel	500,000	1970
U504	#6 fuel	171,400	1976
U505	#6 fuel	171,400	1976
U508	Oily water	10,000	1980
U510	Oily water	500	1981
U511	Oily water	48,000	1981
U512	Oily water	20,000	1983
U513	Oily water	20,000	***1984***
U514	Oily water	30,000	***1985***
U517	Oily water	550	1975
U518	Oily water	3,918	1988
U519	Oily water	3,918	1988
U600	Car Wash Tank	8,000	1979
SG401-424	**Govt. Furnished Liquid	18,000	1990
SG425	H2O2	2,000	1990
SG426	Overflow	1,200	1990
SG427	NH4OH	2,400	1990
SG428	Overflow	250	1990
SG429-431	**Govt. Furnished Liquid	6,000 each	1990

SG432	**Govt. Furnished Liquid	9,000	1990
SG433-434	**Govt. Furnished Liquid	18,000 each	1990
SG435-438	**Govt. Furnished Liquid	4,000 each	1990
SG439-440	Overflow	1,250	1990
SG441	Overflow	250	1990
SG442	Overflow	100	1990
SG443-446	Phosphate Water	18,000 each	1990
SG447-449	Portable PO4 Water	18,000 each	N/A
SG450	Portable PO4 Water	6,000	N/A
SG451	Dilute KCr	22,000	Unknown

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

XII. CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

XIII. PUBLIC PARTICIPATION

The proposed permit appeared at public notice in the Newport News *Daily Press* from August 6, 2002, to September 6, 2002.